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AUTHOR Mignon, Edmond, Ed.
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ABSTRACT

Cooperative arrangements between search service vendors, database producers, and teachers of online searching would recognize the needs of the latter while benefiting each group. A representative of an official organization of faculty specializing in teaching online searching, would speak for the group in discussions with search services, database suppliers, and other training/educating organizations, providing a basis for communication and the exchange of ideas and materials. Special contracts for classroom instruction should continue to be encouraged. However, a closer relationship between educators and vendors would result in more flexible contract terms that would allow for mutual review and sharing of materials, as well as delineate current and future needs for online instruction, such as the liberalization of educational password application and increased hours of accessibility. Additional future needs would include: (1) streamlined introduction to search languages, (2) database oriented workbooks, (3) subject oriented workbooks, and (4) low-cost evaluative online self-instruction programs. Educators would serve vendors as resource persons in preparing instructional materials and presentations, reviewing search aids, testing user manuals and workbooks, and aiding in evaluative research studies. (CWM)

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UNIVERSITY OF WASHINGTON
School of Librarianship

NEW TECHNIQUES IN THE TEACHING OF ONLINE SEARCHING

An Institute for Library Educators
Seattle, Washington, March 20-24, 1978

Position Paper No. 2:

On The Relationship Between Library Schools, Search Service Vendors, and Database Producers

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Edmond Mignon

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC) AND USERS OF THE ERIC SYSTEM."

edited by

Edmond Mignon

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0. INTRODUCTION

In March 1978, the University of Washington School of Librarianship conducted an institute for library educators on new techniques in the teaching of online searching, funded by a grant from the United States Office of Education under Title II-B of the Higher Education Act of 1965. The Institute was attended by faculty members specializing in the teaching of online searching from twenty library schools representing all parts of the nation. One accomplishment of this Institute was the drafting of this Position Paper representing the collective judgement of these specialists concerning desired relationships between library schools, search service vendors and database producers. These recommendations do not carry any legal or official authority from the U.S. Office of Education or any other organization, but represent the considered judgement of a substantial proportion of the nation's most experienced people in this pedagogical specialization. Although there was strong support for the philosophy and tone of this document, not all of the individual recommendations represent unanimous agreement of the participants.

1. GENERAL

For some time it has been the practice of search services and database producers to encourage communication with users of their products by means of training sessions, newsletters, demonstrations at professional meetings and a variety of other supplementary services. These services are primarily intended for professional searchers and are not specifically focused on the needs of educators. Notwithstanding that fact, academic faculty value and make use of them. However, teachers of online searching represent a class of users who have distinctive and specialized needs which have points in common with, but differ in emphasis from, the practicing professionals for whom the vendors provide their user assistance services. Search services and database producers have so far recognized this user class primarily through the provision of low-cost, non-royalty connect time rates for classroom instruction. But aside from this, educators have largely remained an invisible user group, not only to the search services, but to themselves as well. It is in the

enlightened interest of all parties concerned that this group of users identify itself and make arrangements for active, continuous, organized communication, both among its own members, as well as with the vendors. If the vendors were more aware of the needs of this group, more consideration could be given to its needs in the activities of organizations that supply the services that educators depend upon in meeting their responsibilities to prepare professionals to be skilled and informed operators of online search services.

2. COMMUNICATION AMONG EDUCATORS

As a basis for communication and exchange of ideas, it is recommended that a user group of faculty who specialize in the teaching of online searching should be officially organized. It should be affiliated with one of the professional societies, most likely the American Association of Library Schools or the American Society for Information Science, and should have meetings as part of the annual conferences of these organizations. The group should have a member who could represent its interests in discussions with search services and database suppliers in particular, and with organizations and associations that are involved in education and training in general. This representative would have the authority to speak for the group and would not only represent its interests to the information industry, but would also speak for it in discussions with the Deans Group of AALS.

2.1 Publications:

It is recommended that this user group investigate the most appropriate sources for the regular publication of substantive information about developments of educational programs, pedagogical techniques, teaching materials and related matters of specific interest to teachers of online searching. One of the standard professional publications, such as Online magazine or Journal of Library Education, should be contacted with a request to provide space for a regular feature that would be devoted to these concerns. The search services should also be encouraged to provide focused attention to matters of education and training in their newsletters.

2.2 Materials:

Arrangements should be made with the ERIC Clearinghouse on Information Resources, for making quality exercises and tutorial materials successfully developed by one academic institution available to other educators. The recent release of the ONTAP Workbook (1) is commended as an outstanding example of this sort of service. The development and distribution of more products of this quality and character should be encouraged.

3. VENDOR SERVICES FOR EDUCATORS

3.1 Introduction:

In general, communication between educators and vendors should be encouraged in order to support a mutually beneficial constellation of activities which will promote professionalism by preparing well qualified professional searchers who will have the skills and background to provide the most effecitve use of databases for an increasingly large and diverse number of information users. A good start has been made in this area of cooperation, but it must be recognized that the demand for online services, hence skilled searchers, is increasing rapidly and arrangements between search services and library schools which were established two or three years ago are no longer as functional as they were at that time. There is concern that unless there is a much more active communication between educators and vendors than what is now typical, the demand for qualified searchers will outstrip the capacity of library schools to provide adequately prepared personnel. In response to a survey that was conducted as one of the activities of this Institute, twenty eight educators from twenty five library schools reported that they provided substantive training in online searching to a total of approximately 830 students during the 1976-77 academic year. Twenty three of the respondents said that they expected these programs to increase (18 said "increase considerably") by 1980 (2). If we consider that these responses come from slightly less than half the library schools in the country we can make the prediction that the number of

professional librarians who are entering the profession each year with online search training can be reckoned in the thousands. If we then make the reasonable assumption that the majority of the librarians performing professional searches in the years ahead will be drawn from the ranks of these graduates, it is clear that the character and level of vendor support for classroom instruction will be likely to have a significant impact on the extent and quality of the use that these graduates will make of online databases. Although the current tendency is for library schools to increase their commitment to the teaching of professional searchers, the responsibility of the schools to prepare proficient searchers cannot be met simply by more dollars and additional equipment. The material and staff resources for the support of this training will continue in one way or another to be limited, and the significant changes in educational programs are most likely to take place in the area of more sophisticated pedagogical practices and greater attention to more efficient methods for preparing graduates to meet higher standards of entry skills. In order for such programs to stay abreast of professional and technological development, it will be important for educators to have a much closer and better organized relationship with the vendors than what has been the case so far. In the following pages, we disucss some specific considerations that, in the view of the Institute participants, invite prompt attention.

3.2 Contractual and Ethical Considerations:

The practice of providing special contracts for classroom instruction is a mainstay of sound instructional programs and should be encouraged. The provision of low rates for educational institutions is much appreciated, but even at these low rates, the cost of providing hands-on experience to produce adequately trained searchers is not at all negligible in terms of the size of typical operating budgets for library schools. Search services are strongly encouraged not to raise these rates.

Terms of contracts should be as flexible as possible, and in particular it would be preferable for producers, search services and educators to arrange for a

mutual review and sharing of materials, rather than imposing any specific one-way requirements, for example, that schools on educational contracts must submit copies of their teaching materials to suppliers. A commitment to a shared review of one another's materials would be mutually beneficial, and would help to promote a closer, more understanding relationship between educators and vendors, and would help to keep the quality of educational materials from all of these sources at a high level. Although the vendors have information on the amount of use that library schools are making of their systems, they have relatively little knowledge of how they are being used. A program of mutual review would benefit the vendors by informing them of the features of their services that are receiving the greatest pedagogical attention, and would also help them to identify tutorial services and products that educators need. On the other hand, it would also benefit the educators by keeping them informed and up to date about the details of system features and vendor activities.

In the language of these contracts "educational use" of databases is best left as a broad term which will have varying definitions that will change from time to time and from one academic institution to another. However, educators recognize a good faith commitment to database suppliers not to use online services for the generation of revenue and not to make a practice of using educational passwords to provide user services that would be in competition with libraries and other institutions which regularly provide user services at commercial rates. At the present time there is every reason to believe that the library schools value their instructional rates much too highly to be tempted to abuse this courtesy, but the Institute participants wish to record their awareness of this danger, and to affirm their wish to guard against inappropriate uses of the privileges provided by their contracts.

3.3 Areas of Increased Support:

The needs for stronger support for rapidly expanding educational programs fall into two categories: one is the area of perceived current needs, and the other deals with potentially useful services which should be mutually considered by producers and search services in consultation with the educators.

3.3.1 Current Needs:

Passwords: The increased attention to online services in all parts of the library school curriculum suggests the desirability of a more liberal application of educational passwords. It would be desirable, for example, to have enough passwords for all faculty in the same school who teach in this area to have their own user numbers. This is not only a convenience for the control of password usage, but also helpful to the school in keeping records of the costs associated with different courses that use online services.

There should also be a recognition of problems of access security which are distinctive to instructional situations. In a public service situation, the searching is typically performed by a handful of trusted professionals, hence the proportion of the staff that know the passwords is small and stable. In a teaching situation, the hands-on practice is undertaken by scores of students who leave the school after completing their degree requirements. Thus the group having access to the system is relatively large and transient. It would therefore be desirable for the school to have a means whereby it can control the use of its passwords over a period of time, either by the use of time-dependent passwords, revisable passwords or security codes.

Hours: The hours in which educational passwords are accepted by the system have become increasingly liberal, and this has greatly enhanced student access to online searching, but it is desirable that they should be still further liberalized in order to make the files more accessible in terms of the realities of academic schedules. At this time, this is a particularly vexatious problem for schools in the Eastern time zone. There is far more activity today then there was even two years ago in the use of system demonstrations and consciousness-raising presentations in all areas of the curriculum. In particular, there has been an unprecedented expansion in the demand for such presentations in continuing education programs, therefore there needs to be more latitude in the times when such demonstrations can be provided. Liberalized hours would also make it possible for schools to establish more convenient schedules for students to engage in hands-on practice. Typically, the online searching courses have a relatively large number of students and a small number of dedicated terminals, usually three or less, and in several cases

only one. When the access times are limited, it means that there are large blocks of the academic schedule in which the terminals are idle, and this also creates problems in scheduling practice times for the students. These problems are aggravated when instruction is being provided in more than one search service, each with different schedules of educational access time.

Copying: Much of the material provided by vendors and suppliers is protected by copyright. The right of organizations to control the dissemination of their products is acknowledged, but the distribution of learning materials is one of the major tools of classroom instruction, and the information in user manuals and search aids is frequently not available in royalty free publications. It would be a considerable convenience if contracts between search services and academic institutions were to contain language expressly granting permission for the incidental reproduction of brief passages from their materials for instructional uses.

3.3.2 Future Needs:

Workbooks and Tutorial Services: There will continue to be a need for publications and possibly CAI programs of a specifically tutorial nature. It is not simply a matter of having more materials of this sort, but rather of having closer cooperation between suppliers and educators in identifying and preparing the kinds of materials that are most needed. The workbooks by Bourne (3) and by Stockey and Basens (4) have been successfully used by many schools and represent a valuable service in training students to use the command languages of search services. However, there are three areas of instruction in which we anticipate a need for additional materials.

1. Streamlined introduction to search languages. These would be workbooks which provide rapid familiarization with a handful of the most frequently used features of search routines, which could be completed by the students in the length of time normally required by two or three homework assignments. The need for these publications currently rises in the case where databases are introduced as part of subject materials courses, such as Bibliography of the Sciences, in which there is not time to provide full-scale training in literature searching, but students need to have enough elementary facility with the search languages in order to call up

the databases for exploratory and illustrative examination. Such very brief workbooks could serve as a link between consciousness-raising demonstrations of online services in the introductory course (5), and the inspection of the specific online resources in the subject materials courses. There is another potential reason for the value of such materials: in some library school curricula, the separate course in literature searching is an advanced rather than an intermediate course. This implies that students will have taken most of their subject materials courses before rather than after they have had their intensive training in literature searching. A brief, self-instructional workbook would thus not only simplify the task of integrating online databases into the subject materials courses, but would also reduce the amnount of time in literature searching courses spent on the mechanics of terminal operation and command language syntax, and free more class and laboratory time to be devoted to the more demanding topics of search strategy, database evaluation and output analysis.

2. Database oriented workbooks. These are especially needed for such databases as CIS or the Predicasts statistical files, which have specialized capabilities that cannot be efficiently mastered by having students work from the information in user manuals, which are primarily and properly designed as reference manuals rather than instructional materials.

3. Subject oriented workbooks. As the number of available databases continues to grow, there is likely to be an increasing trend toward overlap between different files. This suggests that the area of greatest increase in the demand for tutorial materials will be on the topic of cross-file searching techniques. The procedures for choosing and sequencing files which collectively document the citations for an information request are not yet widely understood or adequately documented (6), and the task of teaching these skills is perhaps the most formidable problem currently facing the teachers of online searching. Although some attention has been given to this issue (7, 8), more help is needed. This area provides a particularly attractive opportunity for cooperation between educators, producers and search services, since the specialized knowledge of all three of these groups will be required in order to produce high quality tutorial materials in this area.

4. Online instruction programs. The provision of exclusively tutorial files, such as ONTAP and MEDLEARN, which provide low-cost evaluative self-instruction in searching techniques, is seen as a welcome addition to the repertory of teaching resources. There has not yet been enough experience with ONTAP to enable educators to form a well considered judgement of its pedagogical utility, but if this experience turns out to be successful, it will be of considerable importance to investigate the possibility of developing similar tutorial files for certain other databases. The ones which have specialized features would lend themselves particularly well to this form of instruction, since these are likely to be of intensive interest to self-selected subsets of the student body rather than the entire class.

In addition, tutorial files have a particularly promising future as a means of continuing education. Professional searchers will have a continuous need to upgrade and enlarge their range of skills, and this need is not entirely met by vendor updating sessions or professional association workshops, chiefly because it is generally not practical to gear such presentations to individual needs. Online tutorials, on the other hand, have the advantages of self-paced learning that are characteristic of CAI systems and also have the advantage of providing the searcher with an evaluation of his/her proficiency in terms of a uniform standard. They have the further attraction of accessibility: as things stand now, the typical case is that the searcher has to go to a place where the continuing education opportunity is being provided, whereas an online tutorial has the advantage of bringing the instruction to the setting in which the searcher regularly provides his/her services. It follows, therefore, that a repertory of online tutorials has the potential to fill an important class of professional needs which is not now being well met. It is acknowledged that good CAI programs at this level are difficult to develop, and some research and study will be needed in order to determine the kinds of programs and materials that would most likely be accepted.

5. Consulting. The current practice of providing immediate assistance by means of toll-free numbers is seen as a highly strategic service for educators as well as searchers. However, in view of the specialized needs of educators, it would be

especially desirable if each of the search services had one staff member who specialized in instructional problems, and who would not only work closely with the library schools, but who could also serve as a liason between educators and the database producers whose files were provided by that search service. This person could also assist in the preparation of workshops or materials of particular interest to educators.

4. EDUCATOR SERVICES FOR VENDORS

Educators have specialized experience and skills as well as needs. One of the mutually beneficial advantages of closer cooperation between educators, search services and database producers, would be the opportunity for educators to serve as resource persons in the preparation of instruction materials and presentations. There have been, for example, some recent demonstrations by database suppliers which would have been considerably more effective if a professional educator had been consulted in planning the organization of these presentations.

Educators can also help in the refereeing and reviewing of search aids. This applies not only to publications of an overtly instructional nature such as workbooks, but also to reference materials such as user manuals and thesauri. Some of our library school faculty are internationally recognized experts on thesaurus construction and their contributions would go far toward helping the database producers prepare well edited thesauri that would be of high quality and utility to the searchers who make use of them.

A number of the Institute participants also indicated their willingness to offer their classes for pre-publication testing of the clarity and utility of user manuals and workbooks. Alert students are constructive, enthusiastic and uninhibited critics of instructional materials. Teachers have traditionally valued the reactions of students as one of the most effective means for maintaining quality of instruction, and if suppliers were to make some of their materials available for this kind of field testing, it could well be another example of the mutual benefit to be gained from closer cooperation.

The contributions of educators will be especially important in the development of online tutorial files mentioned in the previous section. The design and testing of CAI products in other fields have been disappointing, frequently because insufficient attention has been paid to learning patterns and cognitive styles, and this is an area in which academic personnel can do much to ensure that the quality of CAI products for online searching will reflect modern knowledge of learning theory.

Academic instructors are also professional scholars with extensive research experience, and they can be of service to vendors in the design and execution of evaluative studies. There is still very little empirical evidence of the characteristics of databases and very little is known, for example, about specific properties that enhance reliability or efficiency of the files from the professional searchers' point of view. It is not difficult to generate a substantial list of topics in online searching that are both worthy and capable of scholarly investigation, but this research will require close cooperation between producers and scholars if the work is to be carried out on a scale that will lead to non-trivial findings of generalized applicability and long term benefits.

5. SOME NOTES ON TELECOMMUNICATIONS CARRIERS

Although it is recognized that telecommunications utilities such at TYMNET and TELENET are not primarily services for search services or academic institutions, the Institute participants have certain concerns about telecommunication services which bear on their instructional activities and which are mentioned here to round out the general view of relationships between the academic and commercial sectors that this position paper presents.

The practices of the telecommunication carriers could be somewhat more user oriented. More is needed in the way of explanatory publications from carriers, as well as enhanced communication protocols that would provide online assistance capabilities similar to the EXPLAIN and HELP cammands found in search languages. Students, and sometimes instructors, do not fully understand the purpose of the

different steps of the logon procedures, and a less recondite and more easily interpretable alternative version of these codes would be welcome.

There is also some concern about the information provided by rate schedules, which are sometimes misleading when compared with the actual total costs of these services. A fuller explanation and disclosure of these costs would be a desirable convenience.

Some of the institutions that make use of online services are in parts of the country that are still not well served by the carriers. The initiative of the search services in conducting surveys of desired communication services is appreciated, but it would be helpful if the carriers themselves were to give more attention to determining node needs.

In general, it is recommended that the carriers make more of an effort to keep in contact with their users, and particularly to develop more attractive procedures for encouraging their users to make their needs known.

REFERENCES

1. Markey, Karen, and Pauline Atherton. ONTAP: Online Training and Practice Manual for ERIC Data Base Searchers. Syracuse, N.Y., ERIC Clearinghouse on Information Resources, June 1978.

2. Mignon, Edmond. Institute on New Techniques in the Teaching of Online Searching. Final Report. (To be subitted to the U.S. Office of Education, 1978)

3. Bourne, Charles P. DIALOG Lab Workbook. Berkeley, CA, Institute of Library Research, University of California, October 1976.

4. Stockey, E.A. and S.J. Basens. An Introduction to Data Base Searching: A Self-Instruction Manual. Philadelphia, PA, Graduate School of Library Science, Drexel University. April 1977.

5. Mignon, Edmond, ed. Position Paper Number 1: Proposed Standards for Education in Online Searching in the Professional Librarianship Curriculum. Seattle, WA, Institute on New Techniques in the Teaching of Online Searching, June 1978.

6. Wanger, Judith. "Multiple Database Use", Online, V.1, No.4, pp. 35-47, October, 1977.

7. Donati, Robert. "Selective Survey on Online Access to Social Science Data Bases", Special Libraries, V.68, pp. 396-406, 1977.

8. Williams, Martha E. and Scott E. Preece. "Data Base Selector for Network Use", Information Management in the 1980's. (Proceedings of the ASIS Annual Meeting, V.14, pp. C13-D6), 1977.

PROFESSIONAL STAFF

Pauline Atherton
Syracuse University
Syracuse, New York

Charles P. Bourne
Lockheed Information Systems
Palo Alto, California

Edmond Mignon
University of Washington
Seattle, Washington

Frances G. Spigai
Lockheed Information Systems
Palo Alto, California

PARTICIPANTS

Pauline V. Angione
Rosary College
River Forest, Illinois

Bert R. Boyce
University of Missouri
Columbia, Missouri

Lorene B. Brown
Atlanta University
Atlanta, Georgia

Robert S. Burgess
State University of New York
Albany, New York

Charles W. Conaway
Florida State University
Tallahassee, Florida

Robin D. Crickman
University of Oklahoma
Norman, Oklahoma

Robert K. Dikeman
Louisiana State University
Baton Rouge, Louisiana

Sue A. Dodd
University of North Carolina
Chapel Hill, North Carolina

Patricia Emerson
U.S.O.E. Observer
Washington, D.C.

Bahaa El-Hadidy
The Catholic University
Washington, D.C.

Jessica Harris
University of California
Los Angeles, California

Charles R. McClure
University of Oklahoma
Norman, Oklahoma

Constance Mellott
Kent State University
Kent, Ohio

Sydney J. Owens
Simmons College
Boston, Massachusettes

Vivian S. Sessions
McGill University
Montreal, Quebec, Canada

Rod Slade
University of Oregon
Eugene, Oregon

Keith Stirling
Brigham Young University
Provo, Utah

Judith A. Tessier
Syracuse University
Syracuse, New York

Robert Wagers
San Jose State University
San Jose, California

Marilyn D. White
University of Maryland
College Park, Maryland